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# RAW SEQUENCE LISTING PATENT APPLICATION US/09/388,090

DATE: 09/17/1999  
TIME: 14:11:32

Input Set: I388090.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

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1  <110> APPLICANT: Jackson and Harris
2  <120> TITLE OF INVENTION: NEISSERIA SPP. POLYPEPTIDE, NUCLEIC ACID AND USES
3  THEREOF
4  <130> FILE REFERENCE: 7969-082
5  <140> CURRENT APPLICATION NUMBER: US/09/388,090
6  <141> CURRENT FILING DATE: 1999-09-01
7  <160> NUMBER OF SEQ ID NOS: 10
8  <170> SOFTWARE: PatentIn Ver. 2.0
9  <210> SEQ ID NO 1
10 <211> LENGTH: 46
11 <212> TYPE: DNA
12 <213> ORGANISM: Artificial Sequence
13 <220> FEATURE:
14 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
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17 <210> SEQ ID NO 2
18 <211> LENGTH: 69
19 <212> TYPE: DNA
20 <213> ORGANISM: Artificial Sequence
21 <220> FEATURE:
22 <223> OTHER INFORMATION: Description of Artificial Sequence: Primer
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25     taggatttc                                69
26 <210> SEQ ID NO 3
27 <211> LENGTH: 1395
28 <212> TYPE: DNA
29 <213> ORGANISM: Neisseria gonorrhoeae
30 <400> SEQUENCE: 3
31     gtgttcaaaa aataccaata cttcgctttg gcggcactgt gtgccgcctt gctggcaggc 60
32     tgcgaaaagg caggcagctt tttcggtgcg gacaaaaaag aagcatcctt cgtagaacgc 120
33     atcgaacaca ccaaagacga cggcagtgtc agtatgctgc tgcccgactt tgcccaactg 180
34     gttcaaagcg aaggcccggc agtcgtcaat attcaggcag ccccgccccc gcgcacccaa 240
35     aacggcagcg gcaatgccga aaccgattcc gaccgccttg ccgacagcga cccgttctac 300
36     gaatttttca aacgcctcgt cccgaacatg cccgaaatcc cccaagaaga agcagatgac 360
37     ggcggattga acttcggttc gggcttcatc atcagcaaaa acggctacat cctgaccaat 420
38     acccacgtcg ttgccggtat gggcagtatc aaagtccctg tcaacgacaa gcgcgaatat 480
39     accgccaaac tcatcggttc ggatgtccaa tccgatgtcg cccttctgaa aatcgacgca 540
40     acggaagagc taccgctcgt caaaatcggc aatcccaaaa atttgaaacc gggcgaatgg 600
41     gtcgctgcca tcggcgcgcc cttcggtttt gacaacagcg tgaccgcggg catcggtgcc 660
42     gccaaaggca gaagcctgcc caacgaaagc tacacaccct tcattccaaac cgacgttgcc 720
43     atcaatccgg gcaattccgg cggcccgtcg ttcaacttaa aaggacaggt cgtcggcatc 780
44     aattcgcaaa tatacagccg cagcggcgga ttcattggga tctcctttgc catcccgatt 840

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45      gacgttgcca tgaatgtcgc cgaacagctg aaaaacaccg gcaaagtcca acgcggacaa 900
46      ctgggctga ttattcagga agtatcctac ggtttggcac agtcgttcgg tctggataaa 960
47      gccagcggcg cattgattgc caaaatcctt cccggcagcc ccgcagaacg tgccggcctg 1020
48      caggcgggcg acatcgtcct cagcctcgac ggcggagaaa tacgttcttc cggcgacctt 1080
49      cccgtcatgg tcggcgccat tacgcccggg aaagaagtca gcctcggcgt atggcgcaaa 1140
50      ggcgaagaaa tcacaatcaa agccaagctg ggcaacgccg ccgagcatat cggcgcatca 1200
51      tccaaaacag atgaagcccc ctacaccgaa cagcaatccg gtacgttctc ggtcgaatcc 1260
52      gcaggcatta cccttcagac acataccgac agcagcggca aacacctcgt cgtcgtacgg 1320
53      gtttccgacg cggcagaacg cgcaggctta aggcacggcg acgaaatcct agccgtcagg 1380
54      gcaagtcccc gtcaa                                     1395

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55 &lt;210&gt; SEQ ID NO 4

56 &lt;211&gt; LENGTH: 465

57 &lt;212&gt; TYPE: PRT

58 <213> ORGANISM: *Neisseria gonorrhoeae*

59 &lt;400&gt; SEQUENCE: 4

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60      Val Phe Lys Lys Tyr Gln Tyr Phe Ala Leu Ala Ala Leu Cys Ala Ala
61      1          5          10          15
62      Leu Leu Ala Gly Cys Glu Lys Ala Gly Ser Phe Phe Gly Ala Asp Lys
63      20          25          30
64      Lys Glu Ala Ser Phe Val Glu Arg Ile Glu His Thr Lys Asp Asp Gly
65      35          40          45
66      Ser Val Ser Met Leu Leu Pro Asp Phe Ala Gln Leu Val Gln Ser Glu
67      50          55          60
68      Gly Pro Ala Val Val Asn Ile Gln Ala Ala Pro Ala Pro Arg Thr Gln
69      65          70          75          80
70      Asn Gly Ser Gly Asn Ala Glu Thr Asp Ser Asp Pro Leu Ala Asp Ser
71      85          90          95
72      Asp Pro Phe Tyr Glu Phe Phe Lys Arg Leu Val Pro Asn Met Pro Glu
73      100          105          110
74      Ile Pro Gln Glu Glu Ala Asp Asp Gly Gly Leu Asn Phe Gly Ser Gly
75      115          120          125
76      Phe Ile Ile Ser Lys Asn Gly Tyr Ile Leu Thr Asn Thr His Val Val
77      130          135          140
78      Ala Gly Met Gly Ser Ile Lys Val Leu Leu Asn Asp Lys Arg Glu Tyr
79      145          150          155          160
80      Thr Ala Lys Leu Ile Gly Ser Asp Val Gln Ser Asp Val Ala Leu Leu
81      165          170          175
82      Lys Ile Asp Ala Thr Glu Glu Leu Pro Val Val Lys Ile Gly Asn Pro
83      180          185          190
84      Lys Asn Leu Lys Pro Gly Glu Trp Val Ala Ala Ile Gly Ala Pro Phe
85      195          200          205
86      Gly Phe Asp Asn Ser Val Thr Ala Gly Ile Val Ser Ala Lys Gly Arg
87      210          215          220
88      Ser Leu Pro Asn Glu Ser Tyr Thr Pro Phe Ile Gln Thr Asp Val Ala
89      225          230          235          240
90      Ile Asn Pro Gly Asn Ser Gly Gly Pro Leu Phe Asn Leu Lys Gly Gln
91      245          250          255
92      Val Val Gly Ile Asn Ser Gln Ile Tyr Ser Arg Ser Gly Gly Phe Met
93      260          265          270
94      Gly Ile Ser Phe Ala Ile Pro Ile Asp Val Ala Met Asn Val Ala Glu

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95          275          280          285
96      Gln Leu Lys Asn Thr Gly Lys Val Gln Arg Gly Gln Leu Gly Val Ile
97          290          295          300
98      Ile Gln Glu Val Ser Tyr Gly Leu Ala Gln Ser Phe Gly Leu Asp Lys
99      305          310          315          320
100     Ala Ser Gly Ala Leu Ile Ala Lys Ile Leu Pro Gly Ser Pro Ala Glu
101          325          330          335
102     Arg Ala Gly Leu Gln Ala Gly Asp Ile Val Leu Ser Leu Asp Gly Gly
103          340          345          350
104     Glu Ile Arg Ser Ser Gly Asp Leu Pro Val Met Val Gly Ala Ile Thr
105          355          360          365
106     Pro Gly Lys Glu Val Ser Leu Gly Val Trp Arg Lys Gly Glu Glu Ile
107          370          375          380
108     Thr Ile Lys Ala Lys Leu Gly Asn Ala Ala Glu His Thr Gly Ala Ser
109     385          390          395          400
110     Ser Lys Thr Asp Glu Ala Pro Tyr Thr Glu Gln Gln Ser Gly Thr Phe
111          405          410          415
112     Ser Val Glu Ser Ala Gly Ile Thr Leu Gln Thr His Thr Asp Ser Ser
113          420          425          430
114     Gly Lys His Leu Val Val Val Arg Val Ser Asp Ala Ala Glu Arg Ala
115          435          440          445
116     Gly Leu Arg His Gly Asp Glu Ile Leu Ala Val Arg Ala Ser Pro Arg
117     450          455          460
118     Gln
119     465
120 <210> SEQ ID NO 5
121 <211> LENGTH: 1242
122 <212> TYPE: DNA
123 <213> ORGANISM: Neisseria gonorrhoeae
124 <400> SEQUENCE: 5
125     atgctgctgc cgcactttgc ccaactgggt caaagcgaag gcccggcagt cgtcaatatt 60
126     caggcagccc ccgccccgcg caccctaaac ggcagcggca atgccgaac cgattccgac 120
127     ccgcttgccg acagcgaccc gttctacgaa tttttcaaac gcctcgctcc gaacatgccc 180
128     gaaatcccc aagaagaagc agatgacggc ggattgaact tcgggttcggg cttcatcatc 240
129     agcaaaaacg gctacatcct gaccaatacc cagctcggtg ccggtatggg cagtatcaaa 300
130     gtcctgctca acgacaagcg cgaatatacc gccaaactca tcgggttcgga tgtccaatcc 360
131     gatgtcgccc ttctgaaaat cgacgcaacg gaagagctac ccgtcgctca aatcggaat 420
132     cccaaaaatt tgaaaccggg cgaatgggtc gctgccatcg gcgcgccctt cggctttgac 480
133     aacagcgtga ccgccggcat cgtgtccgcc aaaggcagaa gcctgcccaa cgaaagctac 540
134     acacccttca tccaaaccga cgttgccatc aatccgggca attccggcgg cccgctgttc 600
135     aacttaaaag gacaggtcgt cggcatcaat tcgcaaatat acagccgcag cggcggattc 660
136     atgggcatct ctttgccat cccgattgac gttgccatga atgtcgccga acagtgaaa 720
137     aacaccggca aagtccaacg cggacaactg ggcgtgatta ttcaggaagt atcctacggt 780
138     ttggcacagt cgttcggtct ggataaagcc agcggcgcat tgattgccaa aatccttccc 840
139     ggcagccccg cagaacgtgc cggcctgcag gcgggcgaca tcgtcctcag cctcgacggc 900
140     ggagaaatac gttcttcggg cgaccttccc gtcatggtcg gcgccattac gccgggaaaa 960
141     gaagtcagcc tcggcgatat gcgcaaaggc gaagaaatca caatcaaagc caagctgggc 1020
142     aacgccgccg agcataccgg cgcacatccc aaaacagatg aagcccccta caccgaacag 1080
143     caatccggtg cgttctcggt cgaatccgca ggcattaccc ttcagacaca taccgacagc 1140
144     agcggcaaac acctcgctcg cgtacgggtt tccgacgcgg cagaacgcgc aggcttaagg 1200

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146      <210> SEQ ID NO 6
147      <211> LENGTH: 414
148      <212> TYPE: PRT
149      <213> ORGANISM: Neisseria gonorrhoeae
150      <400> SEQUENCE: 6
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152      1          5          10          15
153      Val Val Asn Ile Gln Ala Ala Pro Ala Pro Arg Thr Gln Asn Gly Ser
154      20          25          30
155      Gly Asn Ala Glu Thr Asp Ser Asp Pro Leu Ala Asp Ser Asp Pro Phe
156      35          40          45
157      Tyr Glu Phe Phe Lys Arg Leu Val Pro Asn Met Pro Glu Ile Pro Gln
158      50          55          60
159      Glu Glu Ala Asp Asp Gly Gly Leu Asn Phe Gly Ser Gly Phe Ile Ile
160      65          70          75          80
161      Ser Lys Asn Gly Tyr Ile Leu Thr Asn Thr His Val Val Ala Gly Met
162      85          90          95
163      Gly Ser Ile Lys Val Leu Leu Asn Asp Lys Arg Glu Tyr Thr Ala Lys
164      100         105         110
165      Leu Ile Gly Ser Asp Val Gln Ser Asp Val Ala Leu Leu Lys Ile Asp
166      115         120         125
167      Ala Thr Glu Glu Leu Pro Val Val Lys Ile Gly Asn Pro Lys Asn Leu
168      130         135         140
169      Lys Pro Gly Glu Trp Val Ala Ala Ile Gly Ala Pro Phe Gly Phe Asp
170      145         150         155         160
171      Asn Ser Val Thr Ala Gly Ile Val Ser Ala Lys Gly Arg Ser Leu Pro
172      165         170         175
173      Asn Glu Ser Tyr Thr Pro Phe Ile Gln Thr Asp Val Ala Ile Asn Pro
174      180         185         190
175      Gly Asn Ser Gly Gly Pro Leu Phe Asn Leu Lys Gly Gln Val Val Gly
176      195         200         205
177      Ile Asn Ser Gln Ile Tyr Ser Arg Ser Gly Gly Phe Met Gly Ile Ser
178      210         215         220
179      Phe Ala Ile Pro Ile Asp Val Ala Met Asn Val Ala Glu Gln Leu Lys
180      225         230         235         240
181      Asn Thr Gly Lys Val Gln Arg Gly Gln Leu Gly Val Ile Ile Gln Glu
182      245         250         255
183      Val Ser Tyr Gly Leu Ala Gln Ser Phe Gly Leu Asp Lys Ala Ser Gly
184      260         265         270
185      Ala Leu Ile Ala Lys Ile Leu Pro Gly Ser Pro Ala Glu Arg Ala Gly
186      275         280         285
187      Leu Gln Ala Gly Asp Ile Val Leu Ser Leu Asp Gly Gly Glu Ile Arg
188      290         295         300
189      Ser Ser Gly Asp Leu Pro Val Met Val Gly Ala Ile Thr Pro Gly Lys
190      305         310         315         320
191      Glu Val Ser Leu Gly Val Trp Arg Lys Gly Glu Glu Ile Thr Ile Lys
192      325         330         335
193      Ala Lys Leu Gly Asn Ala Ala Glu His Thr Gly Ala Ser Ser Lys Thr
194      340         345         350

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195 Asp Glu Ala Pro Tyr Thr Glu Gln Gln Ser Gly Thr Phe Ser Val Glu  
196 355 360 365  
197 Ser Ala Gly Ile Thr Leu Gln Thr His Thr Asp Ser Ser Gly Lys His  
198 370 375 380  
199 Leu Val Val Val Arg Val Ser Asp Ala Ala Glu Arg Ala Gly Leu Arg  
200 385 390 395 400  
201 His Gly Asp Glu Ile Leu Ala Val Arg Ala Ser Pro Arg Gln  
202 405 410

203 &lt;210&gt; SEQ ID NO 7

204 &lt;211&gt; LENGTH: 51

205 &lt;212&gt; TYPE: PRT

206 &lt;213&gt; ORGANISM: Neisseria gonorrhoeae

207 &lt;400&gt; SEQUENCE: 7

208 Val Phe Lys Lys Tyr Gln Tyr Phe Ala Leu Ala Ala Leu Cys Ala Ala  
209 1 5 10 15  
210 Leu Leu Ala Gly Cys Glu Lys Ala Gly Ser Phe Phe Gly Ala Asp Lys  
211 20 25 30  
212 Lys Glu Ala Ser Phe Val Glu Arg Ile Glu His Thr Lys Asp Asp Gly  
213 35 40 45  
214 Ser Val Ser  
215 50

216 &lt;210&gt; SEQ ID NO 8

217 &lt;211&gt; LENGTH: 153

218 &lt;212&gt; TYPE: DNA

219 &lt;213&gt; ORGANISM: Neisseria gonorrhoeae

220 &lt;400&gt; SEQUENCE: 8

221 gtgttcaaaa aataccaata cttcgctttg gcggcactgt gtgccgcctt gctggcaggc 60  
222 tgcgaaaagg caggcagctt tttcggtgcg gacaaaaaag aagcatcctt cgtagaacgc 120  
223 atcgaacaca ccaaagacga cggcagtgtc agt 153

224 &lt;210&gt; SEQ ID NO 9

225 &lt;211&gt; LENGTH: 10

226 &lt;212&gt; TYPE: PRT

227 &lt;213&gt; ORGANISM: Neisseria gonorrhoeae

228 &lt;400&gt; SEQUENCE: 9

229 Val Phe Lys Lys Tyr Gln Tyr Phe Ala Leu  
230 1 5 10

231 &lt;210&gt; SEQ ID NO 10

232 &lt;211&gt; LENGTH: 11

233 &lt;212&gt; TYPE: PRT

234 &lt;213&gt; ORGANISM: Neisseria gonorrhoeae

235 &lt;400&gt; SEQUENCE: 10

236 Glu Ile Leu Ala Val Arg Ala Ser Pro Arg Gln  
237 1 5 10

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VERIFICATION SUMMARY  
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